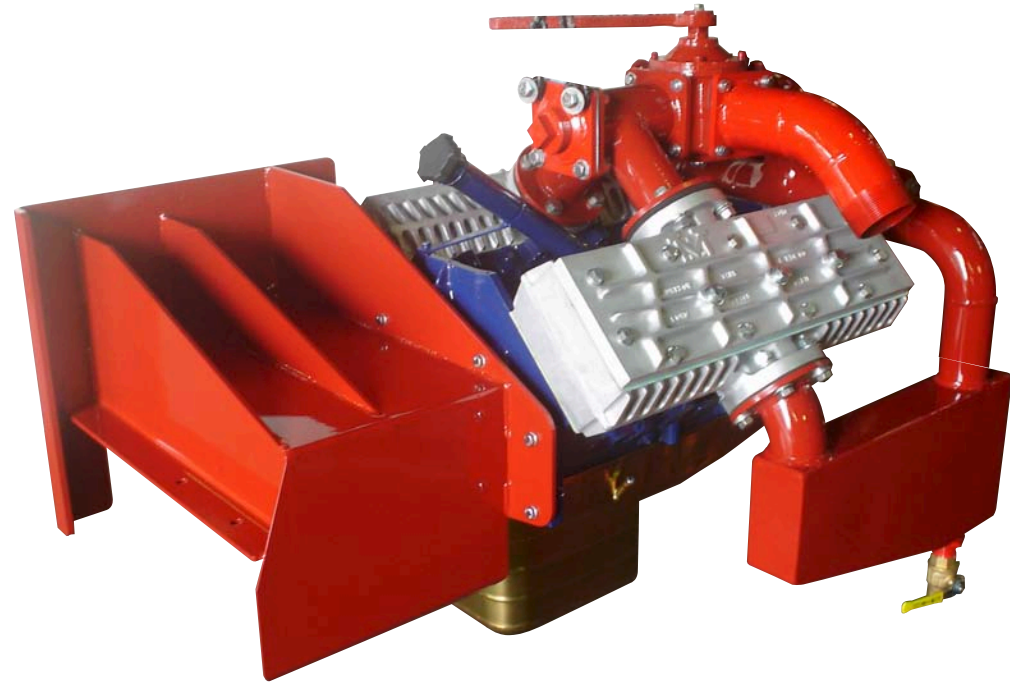




# THOMPSON VACUUM-PRESSURE UNITS

## THOMPSON MODEL "VC" SIDE MOUNTED VACUUM-PRESSURE PUMP



Model VC-454-RM4R-HS Vacuum-Pressure Pump  
Model VC-565-M4R-HS Vacuum-Pressure Pump

Air cooled, positive displacement, 50 psi and full vacuum, continuous duty.

	POSITIVE CFM	
	VC-454	VC-565
1400 RPM-INTERMITENT SERVICE	368	458
1200 RPM-CONTINUOUS SERVICE	316	392
1000 RPM-CONTINUOUS SERVICE	262	327

VC-454-RM4R-HS 38 H.P. REQUIRED AT 50 psi  
VC-565-M4R-HS 44 H.P. REQUIRED AT 50psi

- Recommended continuous duty service 800to 1200 RPM
- Check oil pressure and oil level in pan prior to and during operation. If oil pressure drops below 20psi check the following:
 

A. Oil level	D. Oil pressure gauge
B. Oil viscosity	E. Oil pump and intake screen
C. Oil contamination	F. Rings, bearings, and seals

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- Change oil when contaminated
  - Drain oil and contaminates from oil pan and separator silencers
  - Fill oil pan to 50% capacity with diesel oil
  - Remove injection plug at suction manifold and slowly inject approximately 2 quarts of diesel oil into V.P. Heads while slowly running the V.P. Pump for about 3 minutes.
  - Orain diesel oil and contaminates from the V.P. Pump Oil Pan and Separator Silencers
  - Repeat this procedure if required
  - Replace oil filter and fill pump oil pan to capacity as recommended
- Remove pump head cover plates yearly, or when performance deteriorates, for inspection.
  - Remove 5-C-HSS suction valves and 6-C-HSO discharge valves, disassemble, and clean.
  - Replace all broken or worn components
  - Inspect 7-C-MHT Disc -Replace if grooved
  - Inspect 8-C-8HT Suction valve springs and 9-C-8HT discharge springs and replace if damaged.  
Note: Four (4) springs per valve.
  - Inspect valve seats in V.P. Heads
  - Always replace 15-C-CSD copper valve seat gaskets.
  - Replace 14-C-CSO hold down springs if damaged or partially collapsed.

Note: Follow this procedure after excessive product pullover. Liquid pulled over into V.P. Heads will hydraulically displace 15-C-C5D copper valve seat gaskets under 5-C-HSS suction valves.

Note: Inspect primary and secondary float shut-off valves for proper operation. See Air System Maintenance Instructions.

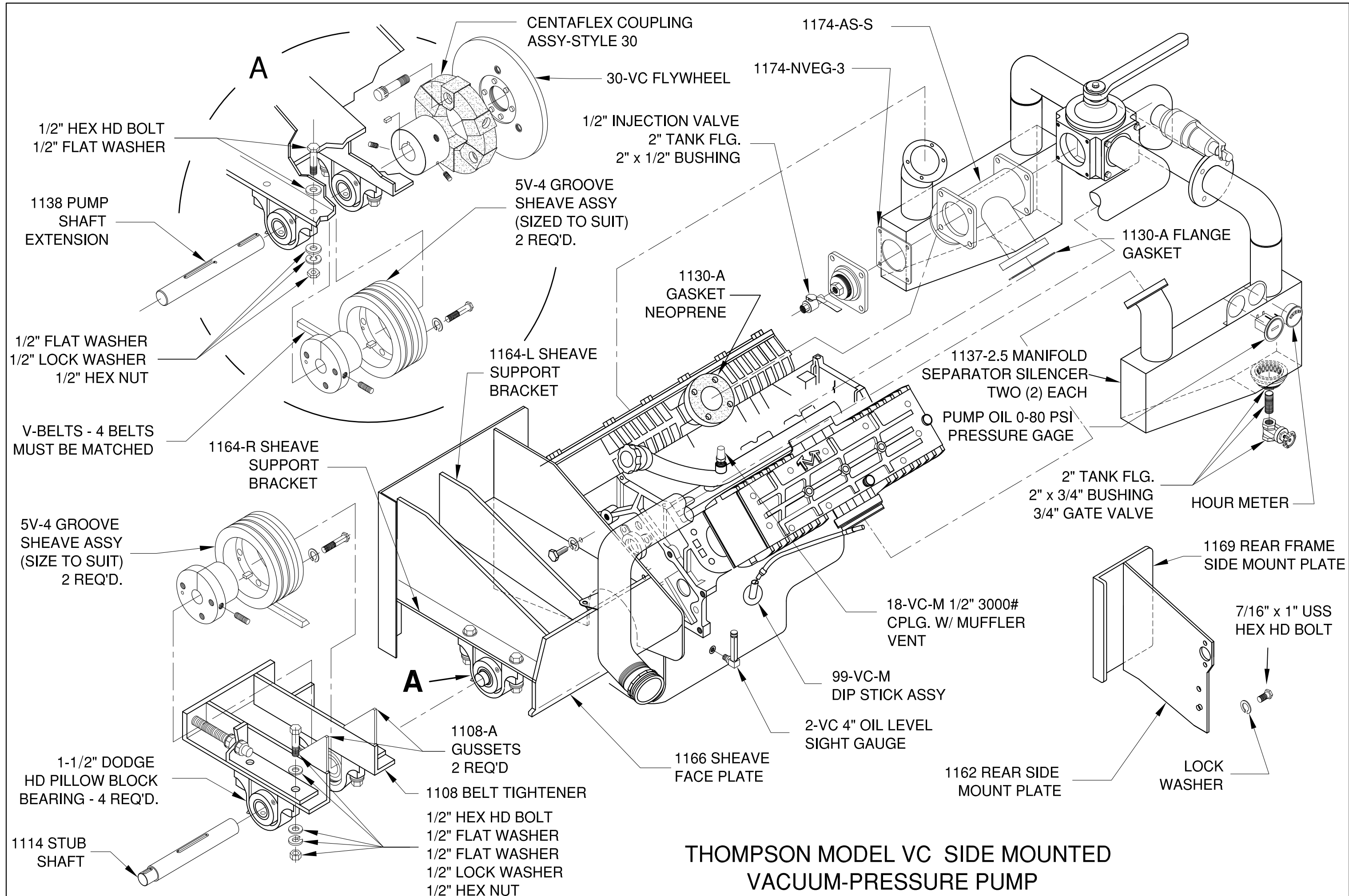
### PUMP DISCHARGE SEPARATOR SILENCER

- Drain accumulated condensate, oil and contaminates daily, especially in the morning before starting operations and after each shift. Excessive oil in separator silencer could result from overfilling the V.P. Pump or from damaged or worn piston rings.

### V.P. PUMP DRIVE ASSEMBLY

- Set screws in sheaves and bearings in a new installation have a tendency to loosen and must be checked after 4 hours of operation. Recheck after 20 hours.
- Readjust belts after 80 hours of operation and check the following:
  - Driveline companion flanges, set screws and U-Joints
  - Bearing set screws and mounting bolts
  - Sheave bushings, keys and set screws
  - Sheave alignment a V-Belt Tension
  - Flexible coupling as per manufactures recommendations
  - V.P. Mounting and manifold bolts.

FOLDOUT FOR EXPLODED VIEW



CENTAFLEX COUPLING  
ASSY-STYLE 30

1174-AS-S

30-VC FLYWHEEL

1174-NVEG-3

1/2" INJECTION VALVE  
2" TANK FLG.  
2" x 1/2" BUSHING

5V-4 GROOVE  
SHEAVE ASSY  
(SIZED TO SUIT)  
2 REQ'D.

1130-A FLANGE  
GASKET

1/2" HEX HD BOLT  
1/2" FLAT WASHER

1138 PUMP  
SHAFT  
EXTENSION

1130-A  
GASKET  
NEOPRENE

1/2" FLAT WASHER  
1/2" LOCK WASHER  
1/2" HEX NUT

1164-L SHEAVE  
SUPPORT  
BRACKET

1137-2.5 MANIFOLD  
SEPARATOR SILENCER  
TWO (2) EACH

V-BELTS - 4 BELTS  
MUST BE MATCHED

1164-R SHEAVE  
SUPPORT  
BRACKET

PUMP OIL 0-80 PSI  
PRESSURE GAGE

5V-4 GROOVE  
SHEAVE ASSY  
(SIZE TO SUIT)  
2 REQ'D.

2" TANK FLG.  
2" x 3/4" BUSHING  
3/4" GATE VALVE

HOUR METER

18-VC-M 1/2" 3000#  
CPLG. W/ MUFFLER  
VENT

1169 REAR FRAME  
SIDE MOUNT PLATE

99-VC-M  
DIP STICK ASSY

2-VC 4" OIL LEVEL  
SIGHT GAUGE

1162 REAR SIDE  
MOUNT PLATE

7/16" x 1" USS  
HEX HD BOLT

1-1/2" DODGE  
HD PILLOW BLOCK  
BEARING - 4 REQ'D.

1108-A  
GUSSETS  
2 REQ'D

1166 SHEAVE  
FACE PLATE

LOCK  
WASHER

1114 STUB  
SHAFT

1108 BELT TIGHTENER  
1/2" HEX HD BOLT  
1/2" FLAT WASHER  
1/2" FLAT WASHER  
1/2" LOCK WASHER  
1/2" HEX NUT

**THOMPSON MODEL VC SIDE MOUNTED  
VACUUM-PRESSURE PUMP**